Amendments to the Specification:

Please amend the specification as follows:

A. On page 1, in paragraph [0002] of the initial application and of Pub. No. 2004/0147376):

[0002] This invention is generally related to exercise devices for the upper torso of the ~~humans~~ human body, and more particularly, to a weight resistance exercise machine for the muscles surrounding the shoulder joints of a user.

B. On page 1, in paragraph [0003] of the initial application and of Pub. No. 2004/0147376):

[0003] The shoulder is the most mobile joint in the human body. It has 180 degrees of motion in abduction and forward flexion and 360 degrees of motion in circumduction. The shoulder ~~is basically a ball and socket joint with~~ complex consists of three ~~main~~ bones: the upper arm bone (humerus), collarbone (clavicle), and shoulder blade (scapula). ~~The collarbone is one of the main bones of the shoulder joint. The clavicle and acromioclavicular joint help increase the range of motion of the shoulder joint and increase the strength of the shoulder for movements above the shoulder level. The clavicle also protects nerves and blood vessels from the neck to the shoulder and gives the neck structure. The scapula or shoulder blade stabilizes the shoulder from the backside.~~ These bones are held together by muscles, tendons, and ligaments.

C. On page 2, paragraph [0006], through page 3, paragraph [0009] of the initial application (which is paragraph [0006] through paragraph [0009] of Pub. No. 2004/0147376):

[0006] ~~The greatest~~ ~~s~~Stability for the glenohumeral joint is provided by the muscles ~~groups,~~ which cross the shoulder joint ~~and allow some of the movements. Strong muscles extending from the back of the scapula, in front of the joint, crossing the joint superiorly, and extending posterially of the joint form a protective~~ The rotator cuff is a deep muscle group that holds the ~~humerus to~~ humeral head in the glenoid fossa, preventing ~~strengthen the joint and resists possibly~~ instability and injurious movements of the ~~humerus~~ humeral head in ~~anterior, superior and posterior~~ all

directions. The shoulder has a wide range of motion. Circumduction ~~, or a movement of the shoulder joint allows the arm to move along the axis of circumduction or along a horizontal line in the frontal plane passing through both shoulder joints~~ is the arc of circular motion of the shoulder in the saggital plane. The shoulder is also capable of moving through an infinite number of planes of motion, which are perpendicular to the arc of circumduction and which pass through and contain the axis of circumduction.

[0007] Flexion identifies a movement whereby the humerus is brought forward beside the thorax. Extension defines a position in which the humerus is returned from any position of flexion to the ~~relaxed~~ anatomic position. Abduction defines a motion wherein the humerus moves laterally away from the body. If the person swings his arm sideways, the ~~abduction allows the~~ humerus ~~to~~ moves upward as well as laterally ~~and medially~~ to an extended vertical position beside the head. Adduction defines the motion in which the humerus is returned to the side of the body from 180 degrees of abduction. ~~When adduction is combined with partial flexion, the persons can move their arms in front of the torso and cross the arms.~~ Rotation defines the motion of the shoulder ~~body~~ wherein the humerus turns medially or laterally on its long axis. ~~Rotation when combined with other movements produces a variety of motions to allow raising and lowering of the arms, flexion, and abduction.~~

[0008] Muscles surrounding the shoulder can be exercised to protect the shoulder joint and increase the strength in the upper torso area. To enhance strength through all planes of motion, one must strengthen the moving muscles in all planes of motion. The strengthening exercise requires resistance in any plane of motion of the joint through a full 360-degree arc. It is well known that by moving resistance in different planes of motion of a muscle, different planes of fibers are employed to move the resistance, stimulating maximum strength gains within the same specific plane of fibers and motion exercised. Conventional exercise machines ~~allow motion of the shoulder joint by about 90 degrees. For such machines, the shoulder is positioned at 90 degrees of external rotation and 90 degrees of abduction. Such positions may result in injury of the shoulder joint, which may then require a medical intervention~~ provide resistance for shoulder motion in only a few planes of motion. But because strength, stability, and performance of the shoulder are

specifically enhanced only in the planes of motion trained, comprehensive strength training of the shoulder requires resistance exercise in many different planes of motion.

[0009] The present invention contemplates elimination of drawbacks associated with prior art exercise machines and provision of a multi-axis exercise machine for the upper torso that ~~allows~~ provides resistance exercise in an exponential number of planes ~~360-degree motions of the shoulder joint through a weight resistance exercise.~~

D. On page 4, paragraph [0011] through paragraph [0013] of the initial application (which is paragraphs [0011] through [0013] of Pub. No. 2004/0147376):

[0011] It is another object of the present invention to provide an exercise machine that allows the shoulder to move in a variety of planes and about a variety of axes to increase stability and strength of the shoulder joint.

[0012] These and other objects of the invention are achieved through a provision of an apparatus for exercising ~~an~~ the upper torso of a user, which allows the user to move the arms and shoulder joints through multiple planes and about multiple axes of rotation, ~~flexion and abduction of the muscles~~. The exercise machine has an upright positionable on a stable supporting surface and a support body that carries handholds for engagement by the user's arms and hands. The handholds are detachably re-positionable on a guide plate, which extends above the handholds, and to which the upper ends of the handholds are securely attached. Resistance to the movement of the handholds is provided by a weight stack positioned in the upright and connected by a flexible link to a spool, which in turn is connected to a gear assembly.

[0013] The gear assembly is operationally connected to a distant pivot assembly and through an extendable arm, to a proximal pivot assembly. The upper ends of the handholds are connected to the proximal pivot assembly, ~~allowing to transmit the weight resistance~~ providing force transmission to the handholds. During movement of the handholds, the axes of rotation of the handholds are always oriented parallel to each other and perpendicular to the arc of circumduction of the shoulder joints of the user, in the preferred embodiment. The rotational arcs of ~~the~~ exercise

are perpendicular ~~to a rotational plane of the exercise of the shoulder joints and~~ to the plane of circumduction of the corresponding shoulder of the user in the preferred embodiment.

E. On page 6, paragraph [0022] of the initial application (which is paragraph [0022] of Pub. No. 2004/0147376):

[0022] Mounted on the base 12 is a user station 32, which comprises a chair support member 30, which is adapted to support a user chair 32 thereon. The chair 32 has a horizontal seat 34 and a vertical back 36 adapted to support a person in a sitting position facing towards or away from back 36 for use of the apparatus of the present invention. The chair support member 30 is fixedly attached to the vertical upright 14 along a vertical side 38 thereof.

F. On page 7, paragraph [0026] of the initial application (which is paragraph [0027] of Pub. No. 2004/0147376):

[0026] An upper end of the handle 22 is secured in a cylindrical member 81, which in turn is attached to an attachment block 82; an upper end 84 of the handle 20 is similarly secured, through a cylindrical member 83 to an attachment block 86. The handholds are secured to the attachment blocks 82, 86 such that their axes of rotation 200, 201 are always parallel to each other and perpendicular to an arc of circumduction of the shoulder joints of a user seated in the user station 30. The handle 22 is provided with a handgrip 88; the handle 20 is provided with a handgrip 90. The handgrips 88 and 90 are rigid bars affixed to respective lower ends of the handles 20 and 22. The handles 20 and 22 can be optionally provided with cushioned arm engaging members 92 and 94, respectively.

G. On page 8, paragraph [0027] of the initial application (which is paragraph [0027] of Pub. No. 2004/0147376):

The distant pivot assembly 74 is operationally connected to a lifting gearbox 100 through a connecting shaft 102. The distant pivot assembly 74 pivots about a pivot pin 104 extending through the unit 74 and engaged with an upright plate 106. A supporting plate 108 supports the lifting gearbox 100 and the upright plate 106. A plurality of pulleys 110 is mounted behind the lifting gear box 100. A flexible link, such as for instance belt 112 extends between the pulleys 110 and the

weight stack 16. The flexible link 112 wounds about a spool ~~188~~ 118, a rotating shaft of which (not shown) is operationally connected to the shaft of the gear assembly 100. Tensioning of the belt 112 causes the weight stack 16 to be lifted, to some degree, and move the shaft 114 supporting the weight stack 16 within a weight stack sleeve 116.

H. On page 8, paragraph [0028] of the initial application (which is paragraph [0028] of Pub. No. 2004/0147376):

In operation, the user is seated on the seat 34 with his legs on opposite sides of the chair seat 34. The user grasps the handgrips 88 and 90 such that the user's arms contact the cushioned arm supports 92 and 94. With the handle attachment blocks 82 and 86 in an uppermost position on the guide 60, such as shown in Figure 2, the user applies ~~a squeezing~~ force on the handles 20 and 22 to push them together or apart. The telescopic shaft 76 is extended fully in this position. ~~Rotational force of to proximal pivot assembly 72.~~ The pivotal motion of the handholds 20, 22 is resisted by the weight stack 16, causing the muscle fibers to grow and elongate. The rotational axis 200, 201 of the handholds 20, 22 is always perpendicular to the arc of circumduction of the user's shoulder joint, allowing a multi-axis movement of the shoulder joints.

I. On page 8, paragraph [0029] of the initial application (which is paragraph [0029] of Pub. No. 2004/0147376):

[0029] To continue exercising the muscles at different angles and axes, the user repositions the carrying plate 61 with attachment blocks 82 and 86, to the back and down along the guide plate 60. The user secures the attachment blocks 82 and 86 in the newly selected position noting that the telescoping shaft 76 has been shortened. In the new position, the axes of rotation 200, 201 of the handholds 20, 22 are oriented at a different angle in relation to a horizontal plane. The user repeats the extension and squeezing motion on the handle 20 and 22, again acting against the resistance of the weight stack 16.

J. On page 9, paragraph [0033] of the initial application (which is paragraph [0033] of Pub. No. 2004/0147376):

[0033] Due to the uniform force created by the weight stack 16 on both handholds 20, 22, the movements of the handles 20 and 22 facilitate symmetrical exercise of both arms and muscle groups surrounding the shoulder joints. The rotational axes 200, 201 of movement of the handholds 20, 22 are always parallel to each other, with the plane of the exercise always perpendicular to the arc of circumduction of the shoulders of the user. The ~~centerline~~ rotational axis 200, 201 of each handle 20, 22 passes through the center of the corresponding glenohumeral joint, intercepting and perpendicular to the axis of circumduction of the shoulders.

K. On page 10, paragraph [0035] of the initial application (which is paragraph [0034] of Pub. No. 2004/0147376):

[0034] The axes of rotation 200, 201 of the handholds define the rotational axis of exercise for the corresponding shoulder of the user. When the user moves the handles 20 and 22, revolving about the rotational axis of the exercise, and the handles move in an arc, which allows complete extension, abduction and rotation of each shoulder of the user. The opposite moments of force produced by the left and right handholds are uniformly transmitted to the telescoping arm and then to the distant pivot assembly and the lifting gearbox, in effect connecting the output of the proximal pivot assembly to the gear box input shaft in series. The user-created moment vector is opposite in direction to and maintained in a co-linear relationship with the resistance moment vector transmitted through the telescoping shaft. The telescoping shaft 76 has the capability of telescoping within itself or through gearing within the resistance gear assembly.